AMENDMENT

In the Claims:

Please amend the claims as follows:

- 1. (Original) A method of inhibiting a cancer cell comprising administering to the cancer cell a composition comprising a PPT1 modulator in an amount effective to reduce PPT1 activity level.
- 2. (Original) The method of claim 1, wherein inhibiting a cancer cell comprises altering proliferation, metastasis, contact inhibition, soft agar growth, cell cycle regulation, tumor formation, tumor progression, differentiation, programmed cell death, or tumor invasion.
- 3. (Original) The method of claim 1, wherein the PPT1 modulator comprises a proteinaceuous composition.
- 4. (Original) The method of claim 3, wherein the modulator competitively binds to PPT1.
- 5. (Original) The method of claim 4, wherein the modulator is an antagonist of PPT1.
- 6. (Original) The method of claim 1, wherein the modulator decreases the amount of PPT1.
- 7. (Original) The method of claim 1, wherein the modulator inhibits expression of PPT1.
- 8. (Original) The method of claim 4, wherein the modulator is at least one peptide or peptide mimetic that selectively interacts with PPT1.
- 9. (Original) The method of claim 8, wherein the modulator is at least one peptide that selectively interacts with PPT1.

- 10. (Original) The method of claim 8, wherein the modulator is at least one peptide mimetic that selectively interacts with PPT1.
- 11. (Original) The method of claim 9, wherein the peptide comprises at least or at most 5 contiguous amino acids from SEQ ID NO:3.
- 12. (Currently amended) The method of claim 11, wherein the peptide comprises the sequence VKIKK (SEQ ID NO:12).
- 13. (Original) The method of claim 9, wherein the peptide comprises at least or at most 5 contiguous amino acids from SEQ ID NO:4.
- 14. (Currently amended) The method of claim 13, wherein the peptide comprises the sequence YCWLR (SEQ ID NO:13).
- 15. (Original) The method of claim 8, wherein the peptide or peptide mimetic is attached to a lipid component.
- 16. (Original) The method of claim 15, wherein the lipid component is a fatty acid.
- 17. (Original) The method of claim 16, wherein the fatty acid is unbranched.
- 18. (Original) The method of claim 15, wherein the lipid component is 8 to 30 carbons long.
- 19. (Original) The method of claim 18, wherein there is a double bond between C4 and C5.
- 20. (Original) The method of claim 15, wherein the peptide or peptide mimetic is attached to the lipid component through a non-hydrolyzable link.
- 21. (Original) The method of claim 15, wherein the lipid component comprises an oxime ether.

- 22. (Original) The method of claim 12, wherein the peptide is DAP1.
- 23. (Original) The method of claim 22, wherein DAP1 is in an α -ketoamide form.
- 24. (Original) The method of claim 8, wherein the modulator of PPT1 is a peptide mimetic.
- 25. (Currently amended) The method of claim 24, wherein the modulator of PPT1 is a peptide mimetic of the amino acid sequence VKIKK (SEQ ID NO:12).
- 26. (Currently amended) The method of claim 24, wherein the modulator of PPT1 is a peptide mimetic of the amino acid sequence YCWLR (SEQ ID NO:13).
- 27. (Original) The method of claim 24, wherein the peptide mimetic comprises a lipid component.
- 28. (Original) The method of claim 1, wherein the modulator of PPT1 is a nucleic acid containing a promoter operably linked to a PPT1 gene segment.
- 29. (Original) The method of claim 28, wherein the PPT1 gene segment is positioned, in reverse orientation, under the control of a promoter that directs expression of an antisense product.
- 30. (Original) The method of claim 28, wherein the nucleic acid encodes a ribozyme specific for an RNA transcript of PPT1 in a cell expressing an RNA transcript of PPT1.
- 31. (Original) The method of claim 4, wherein the modulator is an antibody composition comprising an antibody that recognizes PPT1.
- 32. (Original) The method of claim 1, further comprising administering to the cancer cell a composition comprising a chemotherapeutic drug.

- 33. (Original) The method of claim 1, wherein the cell is in a mammal.
- 34. (Original) A method of treating a subject with cancer comprising administering to the subject a PPT1 modulator in an amount effective to inhibit a cancer cell in the subject, thereby conferring a therapeutic benefit on the subject.
- 35. (Original) The method of claim 34, wherein the modulator is a peptide or peptide mimetic that selectively interacts with PPT1.
- 36. (Original) The method of claim 35, wherein the modulator is a peptide.
- 37. (Original) The method of claim 35, wherein the modulator is a peptide mimetic.
- 38. (Original) The method of claim 36, wherein the peptide comprises at least or at most 5 contiguous amino acids from SEQ ID NO:3.
- 39. (Original) The method of claim 38, wherein the peptide comprises the sequence VKIKK.
- 40. (Original) The method of claim 36, wherein the peptide comprises at least or at most 5 contiguous amino acids from SEQ ID NO:4.
- 41. (Original) The method of claim 40, wherein the peptide comprises the sequence YCWLR.
- 42. (Original) The method of claim 35, wherein the peptide or peptide mimetic is attached to a lipid component.
- 43. (Original) The method of claim 42, wherein the lipid component is a fatty acid.
- 44. (Original) The method of claim 39, wherein the peptide is DAP1.

- 45. (Original) The method of claim 44, wherein DAP1 is in an α -ketoamide form.
- 46. (Original) The method of claim 34, further comprising treating the subject with a chemotherapeutic drug.
- 47. (Original) A method of screening a candidate substance for anti-cancer activity comprising:
 - (i) contacting a cancer cell with the candidate substance; and
 - (ii) assaying the compound's ability to modulate PPT1.
- 48. (Original) The method of claim 47, wherein modulation of PPT1 comprises altering PPT1 expression, activity, or location.
- 49. (Original) The method of claim 47, wherein assaying the compound's ability to modulate PPT1 comprises assaying for apoptosis.
- 50. (Original) The method of claim 49, further comprising administering a chemotherapeutic agent to the cell.
- 51. (Original) The method of claim 50, wherein the chemotherapeutic agent is administered to the cell prior to assaying for apoptosis.
- 52. (Original) The method of claim 47, wherein the cell is contacted in vitro.
- 53. (Original) The method of claim 47, wherein the cell is contacted in vivo.
- 54. (Original) A pharmaceutical composition comprising a recombinant vector containing an PPT1 gene segment positioned in reverse orientation, under the control of a promoter that directs expression of an antisense product.

- 55. (Original) A pharmaceutical composition comprising a peptide or peptide mimetic that selectively binds to PPT1 and that is covalently attached to a lipid component through a non-hydrolyzable linkage.
- 56. (Original) A pharmaceutical composition comprising a peptide mimetic that selectively binds to PPT1 and that is covalently attached to a lipid component through a non-hydrolyzable linkage.
- 57. (Original) A method of screening for cancer or pre-cancer in a subject comprising:
 - a) obtaining a sample from the subject;
 - b) assaying the sample for PPT1 amount or activity level;
 - c) comparing the PPT1 amount or activity level of the subject to the PPT1 amount or activity level of a noncancerous sample, wherein elevated PPT1 amount or activity level may indicate cancer or pre-cancer in the subject.